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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,115	06/23/2003	Robert A. Sayman	60446-225; 02ZFM004	9097

26096 7590 07/13/2004

CARLSON, GASKEY & OLDS, P.C.
400 WEST MAPLE ROAD
SUITE 350
BIRMINGHAM, MI 48009

EXAMINER

ABDELNOUR, DENNIS J

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,115

Applicant(s)

SAYMAN ET AL.

Examiner

Dennis J. Abdelnour

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The following is a first action on the merits of application serial 10/602,115 filed on June 23, 2003. Claims 1-20 are pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 6 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6 and 16 recite the limitation "the first shift mode results in a higher level of responsiveness of a transmission actuator" in lines 1-3. It is unclear how the "responsiveness" is measured or how it can be compared between the shift modes – i.e. what constitutes a "higher lever of responsiveness".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-20, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi (USPN 6,032,096).

Takahashi discloses a method of shifting an automated vehicle transmission. A control unit (14) selects an optimum shift pattern characteristic for the automated transmission according to instantaneous running conditions. The method comprises the steps of:

- (a) having at least a first shift mode (normal running mode – see Figure 3) and a second shift mode (freeway running mode – again, see Figure 3), each of the modes permitting a transition from a first gear ratio to a second gear ratio of a transmission;
- (b) electronically sensing at least one vehicle condition (vehicle speed sensor 16, engine speed sensor 17, throttle opening sensor 15 – col. 3, lines 34-40);
- (c) electronically evaluating the sensed at least one vehicle condition (control unit 14 evaluating sensed conditions);
- (d) electronically identifying an appropriate shift mode from among at least the first shift mode and the second shift mode based on the evaluation of step (c); and
- (e) shifting from the first gear ratio to the second gear ratio in the appropriate shift mode (carried out by drive unit 13).

Figure 7(a) and 7(b) disclose an example of a first shift mode (a) and a second shift mode (b). The first shift mode (a) permits shifting from a first gear ratio to a second gear ratio at a first predetermined speed, while the second shift mode (b) permits the same shifting at a lower predetermined speed.

The drive unit (12) controls engine characteristics pursuant to the shifting modes of the automated transmission. Specifically, the drive unit (12) controls ignition timing and an opening angle of the throttle valve according to driving conditions.

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In addition, the plurality of sensed vehicle conditions (vehicle speed sensor 16, engine speed sensor 17, throttle opening sensor 15, among others) are evaluated by control unit (14), wherein each condition is evaluated according to its relative importance, or ranking.

Figure 3 illustrates the at least four shift modes: acceleration run (ascending slope), normal running, freeway run, and slow-and-stop run.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Murakami '487, Spillane (US 2003/0200016), Nanri (US 2001/0037697), Kikuchi '232, and Hägele '301 each disclose transmission control systems having multiple modes of shifting operation.

Facsimile Transmission

6. Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 872-9326**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mailroom processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on _____

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(Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis J. Abdelnour whose telephone number is (703) 305-5309. The examiner can normally be reached on Monday-Friday, 8:00-5:30, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703) 308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dja
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July 1, 2004

Charles A. Marmorek 7/9/04
CHARLES A. MARMOREK
SUPERVISORY PATENT EXAMINER
ART UNIT 3681